

In the Claims

Cancel Claims 10, 13, 24-26 and 66. Amend Claims 11, 14, 46, 63 and 65 as shown below.

E1
11. (Amended) A method for making SNO-Hb[FeII]O₂, which is specifically S-nitrosylated on thiol groups, comprising incubating excess nitrosating agent with purified hemoglobin in the presence of oxygen at pH 7.4 to 9.2.

E2
14. (Amended) A method for making SNO-Hb[FeII], which is specifically S-nitrosylated on thiol groups, comprising incubating excess nitrosating agent with purified hemoglobin in the absence of oxygen at pH 7.4 to 9.2.

E3
46. (Twice Amended) Method for making S-nitrosohemoglobin comprising adding NO to oxyhemoglobin in an aqueous solution at pH 7.4 to 9.2 such that the ratio of NO:hemoglobin is less than about 1:30.

E4
63. (Twice Amended) A method for producing SNO-oxyhemoglobin, said method comprising mixing nitric oxide and deoxyhemoglobin at pH 7.4 and at a heme:NO ratio of less than 10, and exposing the resulting solution to air.

E5
65. (Twice Amended) A method for producing S-nitrosohemoglobin, said method comprising mixing nitric oxide dissolved in an aqueous solution and purified oxyhemoglobin at a heme:NO ratio of less than about 10 in aqueous buffer at pH 7.4.

~ Add the following claims ~ 69-79 Rule 126

69-79
E6
Rule 126
A composition consisting essentially of S-nitrosylated oxyhemoglobin without detectable oxidation of the heme.

70
68.

A method for making a composition consisting essentially of S-nitrosylated oxyhemoglobin without detectable oxidation of the heme, comprising incubating excess nitrosating agent with purified hemoglobin in the presence of oxygen at pH 7.4 to 9.2.

71
69.

The method of Claim 68 in which the nitrosating agent is a low molecular weight S-nitrosothiol.

72
70.

A composition consisting essentially of S-nitrosylated deoxyhemoglobin without detectable oxidation of the heme.

73
71.

A method for making a composition consisting essentially of S-nitrosylated deoxyhemoglobin, comprising incubating excess nitrosating agent with purified hemoglobin in the absence of oxygen at pH 7.4 to 9.2.

74
72.

The method of Claim 71 in which the nitrosating agent is a low molecular weight S-nitrosothiol.

75
73.

A method for reducing blood pressure in a mammal, comprising administering to the mammal an effective amount of a composition comprising nitrosylhemoglobin.

76
74.

A method for treating a disease in a mammal, comprising administering an effective amount of a composition comprising nitrosylhemoglobin to the mammal, wherein the disease is selected from the group consisting of heart disease, brain disease, vascular disease, atherosclerosis, lung disease and inflammation.

77
75.

A method for treating a medical condition in a mammal, comprising administering an effective amount of a composition comprising nitrosylhemoglobin to the mammal, wherein the medical condition is selected from the group consisting of stroke, angina and acute respiratory distress.